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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/696,860	10/26/2000	Chikong Shue	SYCMR-031XX	2819
207	7590	05/04/2004	EXAMINER	
WEINGARTEN, SCHURGIN, GAGNEBIN & LEOVICI LLP TEN POST OFFICE SQUARE BOSTON, MA 02109			PHAN, THAI Q	
			ART UNIT	PAPER NUMBER
			2128	6

DATE MAILED: 05/04/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/696,860

Applicant(s)

SHUE ET AL.

Examiner

Thai Phan

Art Unit

2128

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 19 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 October 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

This Office Action is in response to applicants' amendment filed on Feb. 19, 2004. Claims 1-21 are now pending in the Action.

#### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ben-Dor et al, US patent application no. US 2002/0141418 A1.

As per claim 1, Ben-Dor discloses a method and system for network tunneling over a network with feature limitations substantially similar to the claimed invention (Abstract and Summary of the Invention). According to Ben-Dor, the network interface system includes

a plurality of network node executive components, each one of the network nodes corresponding to one of the emulated networking devices for physical network devices or components (Paragraphs [0051], [0055], for example),

wherein the network node executable code ([0057]), that is operable to execute without modification on the physical networking devices corresponding to one of the plurality of emulated networking devices ([0062]), and including a program component operable to perform signaling and routing ([0067] and [0068]) through bus tunneling.

Ben-Dor discloses images of network components, network drivers, etc. [0071] to [0088]

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for network emulation. Ben-Dor does not expressly disclose images of executable network node as claimed.

Practitioner in the art at the time of the invention was made would have found Ben-Dor network components in a network configuration would imply the claimed limitation of images of executable network node because network in Ben-Dor includes a plurality of network nodes and each network node includes a plurality of images class drivers, components, interfaces, etc. (see [0071] and [0088], and rejection above) for protocol emulation.

As per claim 2, Ben-Dor discloses an emulator with executable codes that is operable to execute without modification on the one of the plurality of network devices operating in networking device cards that make up emulated networking devices as claimed ([0058], [0062]-0064], and [0088], for example).

As per claim 3, Ben-Dor discloses network program components in executable codes for processing data messages, transporting data, transmitting message frames, encryption of data, etc in data communication network with features as claimed ([0062]-[0065], for example).

As per claim 4, Ben-Dor discloses program components for emulating communication trunks from one node to other node as claimed [0062]-[0065], and [0088].

As per claim 5, Ben-Dor discloses program components for emulating network components without modification on the emulated network devices or components through network tunneling mechanism for at least one virtual circuit between a

corresponding one of the plurality of emulated networking devices and others ([0058], and [0068] to [0088]).

As per claim 6, Ben-Dor discloses emulation engine including one processor and memory for emulating by executing emulation components of the physical network devices as claimed [0088].

As per claim 7, Ben-Dor discloses a plurality of network nodes and each of network node including feature limitations for emulation of physical network device and drivers as claimed (Figs. 1 and 2, [0058]-[0064], and [0088]). Further, network simulation is well-known in the art. Liu teaches network simulation and emulation for simulating node to node in network communication (Liu, patent 6,134,514).

As per claim 8, Ben-Dor discloses local area network for network interconnection (Figs. 1 and 2, pages 7-9).

As per claim 9, Ben-Dor discloses an Ethernet network as claimed (Figs. 1-2).

As per claim 10, Ben-Dor discloses physical networking devices and network device emulator as claimed (Figs. 1 and 2).

As per claim 11, Ben-Dor discloses protocol drivers and emulation of protocol driver for physical networking device emulation (Figs. 1 and 2).

As per claim 12, claim 12 is directed to method of operation for the networking device emulator as in claim 1 above, and Ben-Dor discloses a method and system for network tunneling over a network with feature limitations substantially similar to the claimed invention (Abstract and Summary of the Invention). According to Ben-Dor, the network interface system includes

a plurality of network node executive components, each one of the network nodes corresponding to one of the emulated networking devices for physical network devices or components (Paragraphs [0051], [0055], for example),

wherein the network node executable code ([0057]), that is operable to execute without modification on the physical networking devices corresponding to one of the plurality of emulated networking devices ([0062]), and including a program component operable to perform signaling and routing ([0067] and [0068]) through bus tunneling. Ben-Dor discloses images of network components, network drivers, etc. [0068], [0071] and [0088] for network emulation. Ben-Dor does not expressly disclose images of executable network node as claimed.

Practitioner in the art at the time of the invention was made would have found Ben-Dor network components in a network configuration would imply the claimed limitation of images of executable network node because network in Ben-Dor includes a plurality of network nodes and each network node includes a plurality of images class drivers, components, interfaces, etc. ([0068], [0071], and [0088] and rejection above) for protocol emulation.

As per claim 13, Ben-Dor discloses emulator with executable codes that is operable to execute without modification on the one of the plurality of network devices operating in networking device cards that make up emulated networking devices as claimed ([0088], for example).

As per claim 14, Ben-Dor discloses program components in executable codes for processing data messages, transporting data, transmitting message frames, encryption

of data, network topology such as Ethernet, Telnet, or Internet, etc in data communication network with features as claimed ([0053] to [0067], for example).

As per claim 15, Ben-Dor discloses program components for emulating communication trunks for maintaining network communication from one node to other node as claimed through tunneling network bus events [0062]-[0089].

As per claim 16, Ben-Dor disclosure would include program components for emulating pseudo network interface adaptor for virtual private network including emulated virtual circuit maintained for at least one virtual circuit between a corresponding one of the plurality of emulated networking devices and others ([0050], [0051], [0058], and [0062]-[0089]).

As per claim 17, Ben-Dor discloses an emulation engine including one processor and memory for emulating by executing emulation components of the physical network devices as claimed ([0058], [0062]-[0065]).

As per claim 18, Ben-Dor discloses a plurality of network nodes and each of network node including feature limitations for emulation of physical network device and drivers as claimed (Figs. 1 and 2, [0062]-[0088]).

As per claim 19, Ben-Dor discloses a local area network for network interconnections.

As per claim 20, Ben-Dor discloses Ethernet networks as claimed (Figs. 1 and 2).

As per claim 21, Alden discloses physical networking device and associated network device emulator as claimed (Figs. 1 and 2).

***Response to Arguments***

Applicant's arguments with respect to claims 1-21 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to examiner Thai Phan whose telephone number is 703-305-3812.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kevin Teska can be reached on 703-305-9704. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Thai Phan  
Apr. 30, 2004

*Thai Phan*  
Thai Phan  
Patent Examiner  
AU: 2128